

Claims

1. A peptide having an amino acid sequence of Formula I (SEQ ID NO: 1):

$X_1 [Lys\ X_2\ X_3\ Phe\ Gln]_m\ Arg\ Gln\ Ile\ [Lys\ X_4\ Pro\ Phe\ Gln]_n\ X$ in which

5 X_1 is absent or is an acetyl group;

X_2 and X_4 are independently selected from Ileu and Leu;

X_3 is selected from Pro and Trp;

X is a peptidic moiety of a length selected from 1, 2, 3, 4, 5, 6, 7 and 8 amino acids and containing at least one basic amino acid and which is amidated at the C-terminus;

10 m is an integer selected from 0 and 1;

n is an integer selected from 1 and 2;

as well as salt thereof.

2. A peptide according to claim 1, wherein X is a peptidic moiety of a length selected
15 from 5, 6, 7 and 8 amino acids and containing at least one basic amino acid.

3. A peptide according to any of the preceding claims, wherein X contains at least one basic amino acid selected from Lys and Arg.

20 4. A peptide according to any of the preceding claims, wherein X is the following peptidic moiety (SEQ ID NO: 2):

$Asn\ X_5\ X_6\ Met\ X_7\ Trp\ X_8\ X_9\ -NH_2$ wherein

X_5, X_6, X_7, X_8 and X_9 are independently selected from Arg and Lys.

25 5. A peptide according to any of the preceding claims wherein X is of SEQ ID NO: 10.

6. A peptide according to claim 1, wherein m is 0 and n is 1.

7. A peptide according to claim 1 wherein X_1 is acetyl.

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8. A peptide according to claim 1, wherein m is 0 and n is 2.
9. A peptide according to claim 1, wherein m is 1 and n is 1.
- 5 10. A peptide according to any claims from 1 to 9 selected from SEQ ID NO: 7 and SEQ ID NO: 8.
11. A peptide according to any claims from 1 to 10 for use as a medicament.
- 10 12. A pharmaceutical composition comprising a peptide according to any one of claims 1 to 10 and a pharmaceutically acceptable excipient, diluent or carrier.
13. Use of a peptide according to Formula (II) (SEQ ID NO: 3):
$$X_1 [Lys X_2 X_3 Phe Gln]_m Arg Gln Ile [Lys X_4 X_5 Phe Gln]_n X$$
 in which
15 X_1 is absent or is an acetyl group;
 X_2 and X_4 are independently selected from Ile and Leu;
 X_3 and X_5 are independently selected from Pro and Trp;
 X is a peptidic moiety of 1, 2, 3, 4, 5, 6, 7 and 8 amino acids and containing at least one basic amino acid and which is amidated at the C-terminus;
20 m is an integer selected from 0 and 1;
n is an integer selected from 1 and 2;
as well as salts thereof for the preparation of a medicament for the treatment or prevention of a disease or condition selected from Alzheimer's disease, Dementia pugilistica (including head trauma), Hereditary Cerebral Haemorrhage with amyloidosis of the Dutch type (HCHWA-D) and vascular dementia with amyloid angiopathy.
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14. Use according to claim 13 wherein X_5 is Trp.

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15. Use according to claim 13 wherein the peptide according to Formula (II) is of SEQ ID: 1.

16. Use according to claim 13 wherein X_4 is Ile.

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17. Use according to claim 13 wherein X is a peptidic moiety of a length selected from 5, 6, 7 and 8 amino acids and containing at least one basic amino acid.

18. Use according to any claims from 13 to 17 wherein X contains at least one basic amino acid selected from Lys and Arg.

10 19. Use according to any claims from 13 to 18 wherein X is the peptidic moiety (SEQ ID NO: 2) as defined above; or a derivative or analog thereof.

15 20. Use according to any claims from 13 to 19 wherein X is of SEQ ID NO: 10.

21. Use according to claim 13, wherein m is 0 and n is 1.

20 22. Use according to any of the preceding claims from 13 to 21 wherein X_5 is Trp, X is the peptidic moiety of SEQ ID NO: 2 as defined above, m is 0 and n is 1.

23. Use according to claim 13, wherein m is 1 and n is 1.

24. Use according to any claims from 13 to 23 wherein the peptide is of SEQ ID NO: 4.

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25. Use according to any claims from 13 to 24 wherein the peptide is selected from SEQ ID NO: 7, SEQ ID NO: 8 and SEQ ID NO: 9).

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26. Use according to any of the preceding claims from 13 to 25, wherein the disease is Alzheimer's disease.